

(58)

$$2x - 3y = 4$$

$$2x - 5y = -6 \quad (-1)$$

$$\begin{array}{r} 2x - 3y = 4 \\ + \quad -2x + 5y = 6 \\ \hline \end{array}$$

$$2y = 10$$

$$\boxed{y = 5}$$

$$2x - 3(5) = 4$$

$$\begin{array}{r} 2x - 15 = 4 \\ +15 \quad +15 \end{array}$$

$$2x = 19$$

$$\boxed{x = 9.5}$$

Sect. 3.2

#15, 54-62

②

$$y = -3x + 4$$

$$y = 7x - 26$$

$$\Rightarrow \begin{array}{ccc} -3x + 4 & = & 7x - 26 \\ & +26 & +26 \end{array}$$

$$\begin{array}{ccc} -3x + 30 & = & 7x \\ +3x & +3x & \end{array}$$

$$\frac{30}{10} = \frac{10x}{10}$$

$$\boxed{3 = x}$$

$$y = 7x - 26$$

$$y = 7(3) - 26$$

$$y = 21 - 26$$

$$\boxed{y = -5}$$

(3)

$$y = 6x + 2$$

$$3x - 4y = -29$$

$$3x - 4(6x + 2) = -29$$

$$\underline{3x - 24x - 8 = -29}$$

$$\begin{array}{r} -21x - 8 = -29 \\ \quad +8 \quad +8 \end{array}$$

$$-21x = -21$$

$$\boxed{x = 1}$$

$$y = 6x + 2$$

$$y = 6(1) + 2$$

$$y = 6 + 2$$

$$\boxed{y = 8}$$

$$\textcircled{8} \quad \begin{aligned} 6x - 3y - 4 &= 0 \\ x + 2y - 4 &= 0 \quad (-6) \end{aligned}$$

$$\begin{array}{r} 6x - 3y - 4 = 0 \\ -6x - 12y + 24 = 0 \\ \hline -15y + 20 = 0 \\ -20 \quad -20 \end{array}$$

$$\begin{array}{r} -15y = -20 \\ \hline -15 \quad -15 \end{array}$$

$$\boxed{y = \frac{4}{3}}$$

$$6x - 3y - 4 = 0$$

$$6x - 3\left(\frac{4}{3}\right) - 4 = 0$$

$$6x - 4 - 4 = 0$$

$$6x = 8$$

$$x = \frac{8}{6}$$

$$\boxed{x = \frac{4}{3}}$$

$$\begin{array}{r} \textcircled{5} \quad 2x + y = 5 \\ + \quad x - y = 1 \\ \hline \end{array}$$

$$\frac{3x}{3} = \frac{6}{3}$$

$$\boxed{x=2}$$

$$x - y = 1$$

$$2 - y = 1$$

$$\boxed{y=1}$$

$$\begin{array}{r} \textcircled{11} \quad 0 = 9 \\ -4 = 5 \end{array}$$

No Solution
Parallel
inconsistent

$$\textcircled{12} \quad 0 = 0$$

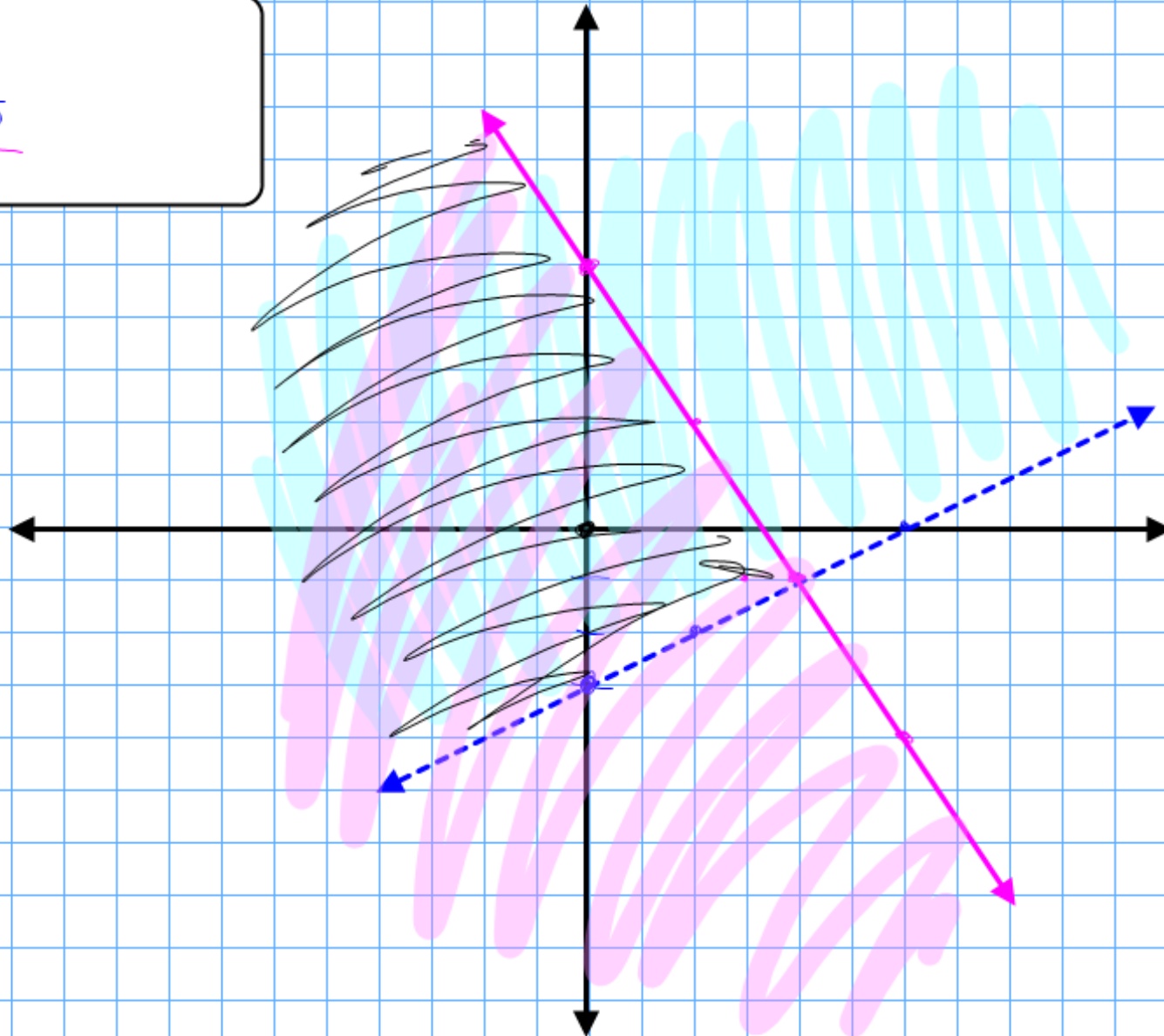
Same line
All solutions
Dependant

Systems of inequalities

Systems of Inequalities

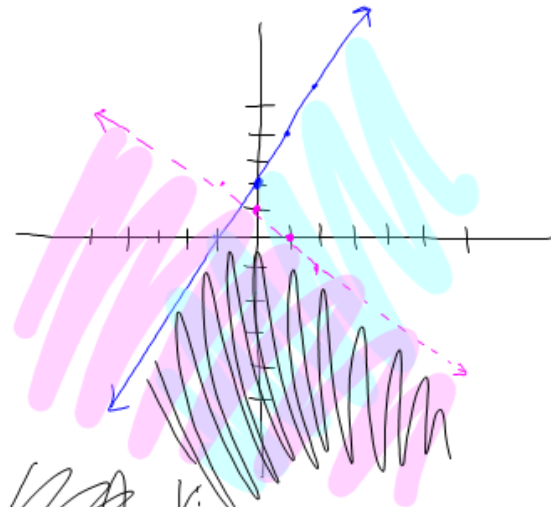
$$y > \frac{1}{2}x - 3$$

$$y \leq -\frac{3}{2}x + 5$$



④ Is $(-3, 2)$ a solution to the system $\begin{cases} y \geq x + 2 \\ 3y < -6x + 6 \end{cases}$
 yes

⑦ graph to solve $\begin{cases} y \leq 2x + 2 \\ y < -x + 1 \end{cases}$



⑧ Solve by graphing $\begin{cases} y > -2 \\ x < 1 \end{cases}$



Sect. 3.3

- #4-11, 30-34, 50 or 51

- Finish worksheet